Claims

1. A combustion chamber for combusting a combustible fluid mixture having a burner (2) disposed on the combustion chamber (1), a liner (4) disposed in the combustion chamber (1), and an outlet opening (3), wherein the liner (4) comprises liner elements (5) which are elastically fixable to a combustion chamber casing (7) by means of rail elements (6), characterized in that the rail elements (6) are disposed on the combustion chamber side and project outward between two adjacently disposed liner elements (5).

2. The combustion chamber according to Claim 1, characterized in that the liner element (5) can be secured by means of a fixing element (8) provided on the outside of the rail element (6).

3. The combustion chamber according to Claim 2, characterized in that the fixing element (8) is formed by a screw.

4. The combustion chamber according to Claim 2, characterized in that the fixing element (8) is formed by a clamping element, particularly a clamping spring.

5. The combustion chamber according to one of the Claims 1 to 4, characterized in that the rail element (6) has a coating (9) at least on the combustion chamber side.

6. The combustion chamber according to one of the Claims 1 to 5, characterized in that the rail element (6) can be cooled.

7. The combustion chamber according to one of the Claims 1 to 6, characterized in that the rail element (6) has liner-like lugs (10) for securing the liner elements (5) with openings (11) for providing a fluidic connection between a

coolant channel (12) of the rail element (6) and a coolant channel (13) of the liner element (5).

8. The combustion chamber according to one of the Claims 1 to 7, characterized by a closed-circuit cooling arrangement.

9. The combustion chamber according to one of the Claims 1 to 8, characterized by being disposed in a fluid-flow machine, particularly a gas turbine.

10. A method for cooling a combustion chamber (1) according to one of the Claims 1 to 9, wherein a coolant flowing through the rail element (6) flows at least partially in the circumferential direction of the combustion chamber (1) in the direction of the liner element (5) and is redirected in a channel (13) of the liner element (5) into or against the flow direction of the combustion chamber (1).

11. The method according to Claim 10, characterized in that air is used as the coolant.

sections 19, through which the flow is in the circumferential direction, and cooling sections 18, through which the flow proceeds axially.

The coolant used in this embodiment is air which is taken from behind an intake compressor of the gas turbine (not shown) and supplied to the cooling system of the gas turbine. The gas turbine has a combustion chamber with a closed-circuit cooling system such that the air extracted from the process for cooling purposes can be fed back again in the combustion chamber. The thermal energy absorbed by the cooling function is thus returned to the process.

The exemplary embodiment illustrated in the figures serves simply to explain the invention and is not restrictive of the invention as claimed. Thus, for example, the shape and design of the liner elements and the rail elements in particular may vary.